Meeting #3 Summary

Water Comprehensive Plan Task Force

May 14, Public Works Garage
Meeting Notes by Andrew Jacobson

Members Present: George Johnson (chair), Yung Kang Lu, Cliff Aichinger, Sarah Clark, Marj Ebensteiner, Bruce Elder, Bob Fossum, Steve Johnson, Hokan Miller, Gregory Page, Tom Petersen, Shirley Reider, Steve Schneider, Ron Struss and Rebecca Wooden

Members Absent: Boa Lee, Obi Sium, John Wells and Kou Vang

Staff Present: Larry Soderholm, Anne Hunt, Brain Tourtelotte, Larry Zangs, Jie Zhao and Andrew Jacobson

Guests Present: John Linc Stine, Barbara Haake and Lance Neckar

1. **Welcome** by George Johnson. The members and staff introduced themselves. After introductions, Johnson regaled us with quotes, passages and religious texts that illustrated the importance of the non-technical side of water, such as: “Filthy water cannot be washed” and “The frog does not drink up the pond in which he lives.”

2. **Public health and water issues** were discussed by John Linc Stine, the division manager of Environmental Health from the Minnesota Department of Health (MDH). Stine defined public health as the greatest good for the greatest number based on preventing problems and treating them as they occur. Environmental health, as defined by MDH, is protecting people from environmental hazards--specifically, real or impending contaminants and their effects. More recently, MDH has expanded its programming beyond environmental hazards to become involved in encouraging healthier communities and lifestyles through urban planning.

   Water and public health principles were codified in the Safe Drinking Water Act passed in 1974. EPA designated states to implement the principles. For Minnesota, MDH is the enforcing body. In Minnesota, only 25 public water systems use surface waters for drinking water, but both Minneapolis and Saint Paul do. Everyone drinks some public water; it is essentially impossible to be independent from the public water supply.

   MDH conducts 150,000 tests a year in waters across the state for approximately 100 different contaminants. Saint Paul and Minneapolis are tested every month.

The Source Water Protection (SWP) program was created in 1996 as an addition to the Safe Drinking Water Act. Three primary parts compose Minnesota's SWP program: wellhead protection, source water assessments and protection of surface water intakes. The Wellhead Protection Plan is administered by the Department of Health to reduce contaminants entering groundwater. The plan created a process to cap and seal wells that are no longer in use. Over 200,000 wells have been sealed in the state (the most in the nation) although nearly 500,000 wells still remain uncapped with 30,000 abandoned wells in Ramsey County alone. Source water assessments demarcate the watershed for waters used by a public water system, whether a well, lake or river. The assessment also identifies where contaminants enter the watershed. Saint Paul's municipal water is from the Mississippi River; thus, the assessment for the Mississippi covers a large portion of the state. Lastly, the protection of surface water intakes includes Saint Paul and Minneapolis because both cities use surface water for their municipal water supply. The SWP plan includes a plan of action to manage potential contaminant sources to the surface water. The plan is then reviewed for approval by the MDH.

Land use has a significant impact on water quality. Stine believes that the SWPP is a critical element in public and environmental health and that it should be even more stringent.

The Emergency Mississippi River Defense Network is another public health initiative related to water. The Network works to identify and control spills. If a serious spill occurs and Saint Paul cannot draw water from the Mississippi for our water supply, Saint Paul has a three week supply of drinking water. Minneapolis however, only has 36 hours. In terms of redundancy and backup, connecting Minneapolis and Saint Paul's water supply together should be pursued.

Emerging water, health issues: Concerns over safe drinking water are growing primarily because of emerging human-made contaminants. Endocrine disruptors and perfluorocarbons (PFCs) are two important issues in the Twin Cities. A major reason these are attracting attention today is because of improved detection methods that allow scientists to detect contaminants at extremely low levels.

PFCs are of immediate concern because they are present in Washington County groundwaters and other urban lakes. PFCs are used ubiquitously, mainly resulting from 3M's production of ScotchGuard and Teflon. 3M initially worried about the acidic nature of PFCs and the possibility of them igniting, so the company dumped the PFCs into basic, limestone deposits. However, the PFCs moved through the limestone and into the groundwater. PFCs have a half-life in humans of 3-5 years and have known liver and thyroid effects. The Department of Health will be testing more urban lakes, especially the Vadnais chain of lakes for PFCs this summer.

Questions, answers and questions for further thought:

- Treating water with activated carbon is the best known way to remove pollutants. However, it costs $4-5 million per well to filter.
- There are 0 PFC levels after the treatment process at McCarron's.
- Should each municipality have its own water utility? There are at least 110 separate water utilities in the seven county region.
- Are any cities good models for environmental health/water issues?
- The most important public health/water issues include:
  1) Promote safe drinking water and encouraging source water protection.
  2) Prevent problems for downstream users.
  3) Prepare for emergencies.

John Linc Stine can be reached at (651) 201-4675.

3. **Sustainable Saint Paul** initiatives were presented by Anne Hunt. Sustainable Saint Paul was initiated by Mayor Chris Coleman and is coordinated by Hunt. There is an interdepartmental staff group that meets regularly to discuss an annual work plan. The group has also incorporated principles from the Environmental Roundtable recommendations.

   Anne Hunt discussed some of the principles and background information on sustainability and city policies before moving into water-specific policies. The Saint Paul Local Surface Water Management Plan was finished in 2005. It fulfills the requirements for and is in conformance with the appropriate federal, state, Metropolitan Council and watershed district plans. To help with these issues, Saint Paul is in the process of hiring a water quality specialist in 2007. Other Sustainable Saint Paul initiatives include improving efforts to coordinate with watershed districts and watershed management organizations on restoration efforts, increasing public education especially through the Second Shift after school program and increasing efforts at reforestation, restoring green spaces and decreasing invasive species.

4. **Interconnections between the Mississippi River, Saint Paul and the National Park Service** were discussed by Steve Johnson. Steve Johnson is a task force member and works for the National Park Service. The Mississippi National River and Recreation Area (MNRRA) was created in 1988, is run by the Park Service and covers the Mississippi River from Crow River to just below Hastings.

   In Saint Paul's early history, the Mississippi served as a transportation corridor both for wanted and unwanted goods (people and products but also sewage and pollution). Today it still serves its transportation purposes although its other purposes, such as ecological and aesthetic, have increased greatly in importance. The Mississippi's importance as a water supply source must also not be underestimated. The SWP program is becoming more important and should become more stringent to help minimize disruptions to surface and ground waters in areas outside of Met Council jurisdiction (fast growing suburban areas outside of the seven county region).

Global warming and the upper Mississippi region:

- Warmer temperatures will spur less snowfall, more precipitation falling as rain and decreased spring flooding events.
- Scientists predict roughly the same amount of precipitation in Minnesota and our region.
- It is also predicted that there will be longer dry spells and larger rain events (leading to worse droughts, worse flash floods and reductions of base flow for rivers and groundwater).

Other notes:

- Pig's Eye treatment plant is one of the largest in the nation.
- The Minnesota and Illinois Rivers which enter the Mississippi River are the two largest contributors (in terms of phosphorus and nitrogen) to the dead zone in the Gulf of Mexico.
- One gallon of ethanol takes 6 gallons of water to produce. Primarily groundwater is used in ethanol production. Increasing numbers of ethanol plants in the state have led to discussions over a water diversion to western Minnesota for ethanol production.
- A cleaner Mississippi has led to increased development pressure on its banks, in turn leading to greater non-point source pollution levels.

5. **Next meeting on June 11** is at the Ramsey-Washington Metro Watershed District.

Meeting ended at 5:40 p.m.